

**TITLE: REMOVABLE AND RECONFIGURABLE DOLL CLOTHING**

**BACKGROUND OF THE INVENTION**

5       **a. Field of Invention**

This invention relates to doll clothing, which can optionally include decorative figures and/or ornamentation thereon, where the doll clothing is removable and reconfigurable.

**b. Problems in the Art**

10       Traditionally, doll clothes are stitched or created from fabric such as that used for conventional human clothing. While they look somewhat realistic, significant labor or resources are required to make them (e.g., small pieces must be cut and sewn). Additionally, such fabricated clothing is not reconfigurable into other clothing types or styles. They are normally fixed in size and shape and, thus, can only be used for generally 15 one size of doll. Still further, such clothing either must hang on a three-dimensional doll or have additional components to allow closure or securing to the doll. This can add cost and bulk to the clothing.

20       Alternative materials simulating doll clothing have been previously proposed. For example, paper two-dimensional simulated clothing is sometimes hung on a two-dimensional doll or doll figure. Another example is two-dimensional plastic pieces that removably adhere by static or co-hesive forces. In practice, these articles lack realism and, depending on the material, can appear bulky, cannot be fitted or removed in a life-like manner, and are restricted to dolls of a particular shape or size.

25       U.S. Patent No. 2,093,207, to Munson, Jr., describes simulated clothing for two-dimensional dolls. The two-dimensional doll clothing has a "roughened rear surface" like felt or wool. The body of the two-dimensional doll can have a surface which allows frictional or adhesive connection of the doll clothing. However, the patent is limited to two-dimensional simulated clothing on a two-dimensional doll. U.S. Patent No. 2,331,776, to Heggedal, is similar, describing removable clothing that can be applied to a two-30 dimensional cutout doll. It mentions oil cloth as an example of how clothing can be adhered to the doll cutout. U.S. Patent No. 3,646,705 to Nicholson is similar, describing

cotton fiber or other suitable fibrous nap material. Simulated clothing has a flocked backing. Adjacent flocked backings of clothing and doll allow removable attachment of the two-dimensional simulated clothing.

U.S. Patent No. 3,753,312 to Hughes Jr. discloses a two-dimensional doll cutout 5 having a tacky vinyl or other soft plastic surface. Simulated clothing, in two-dimensional form, has a similar tacky vinyl coating which allows removable placement of clothing on the doll.

U.S. Patent No. 5,186,673 to Fogerty describes a fabric simulated clothing for attachment to three-dimensional dolls. It is secured to the doll by a resilient waistband.

10 Other clothing pieces are attached by similar elastic features or other structure allowing the clothing to be hung or attached to the doll. No adhesives are involved as a mode of attachment.

The foregoing examples of existing simulated clothing for dolls generally require prefabrication of the clothing pieces and some type of applied surface on the doll that is 15 designed to cooperate with the surface on the simulated clothing to secure the clothing in place. This requires several manufacturing steps and limits use of the clothing to only those dolls adapted for that clothing. It is difficult or impossible to reconfigure the clothing in any meaningful way or to apply it to dolls that do not share the predesigned method of securingment.

20 Therefore, it is a primary object, feature, or advantage of the present invention to improve upon the state of the art.

It is a further object, feature, or advantage of the present invention to provide simulated clothing for dolls that is self-adhering, allowing the clothing to be placed on almost any doll.

25 A further object, feature, or advantage of the present invention is simulated clothing for dolls which can be reconfigured into different articles of clothing for the same doll or different dolls.

A further object, feature, or advantage of the present invention is simulated clothing for dolls which can create an article of clothing with several pieces.

30 Another object, feature, or advantage of the present invention allows the same material to be used to ornament an article of clothing made by the material.

A further object, feature or advantage of the present invention is simulated clothing for dolls which can be secured to three-dimensional portions of a doll.

Another object, feature, and advantage of the present invention is simulated clothing for dolls which can be made from different sized and shaped pieces of material or  
5 cut to desired shapes and sizes.

A further object, feature, or advantage of the present invention is simulated clothing for dolls which is durable and economical.

## SUMMARY OF THE INVENTION

10 The present invention relates to simulated clothing for dolls comprising a piece of material having self-adherent and elastomeric properties so that the material may be applied to a portion of a doll and secured by overlapping portions of the material. One or more pieces of the material can be used to fashion and configure an article of clothing for a doll. The material can be sized originally to be configured into an article of clothing or;  
15 alternatively, it can be cut into desired shapes and sizes. Optionally pieces of the material can be used to ornament pieces of material used for the article of simulated clothing.

Another aspect of the invention is a method for simulating clothing on a doll using material having self-adherent and elastomeric properties. Portions of the simulated article of clothing can be created by one or more pieces of the material that are wrapped around a  
20 portion of the doll and self-adhered.

One aspect of the invention provides a method of dressing a doll by separating elastomeric, non-woven material into pieces, wherein the material includes a first end and a second end, performing or cutting the material into shapes and sizes which simulate the appearance of an article of clothing that can conform to a doll figure, placing the article of  
25 clothing on the doll figure by adhering the first end and the second end to one another to form said article of clothing.

It is another object, feature, or advantage of the present invention to provide doll clothing decorated with ornamentation that is releasably attached to the clothing and readily interchangeable with other clothing or ornamentation items.

30 One or more of these and/or other objects, features, or advantages of the present invention will become apparent from the specification and claims that follow.

**BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 is a front view of a collection of dolls wearing doll clothing according to an embodiment of the present invention.

5       Figure 2A is a front view of a three-dimensional doll figure wearing a bathing suit bottom 62 according to an embodiment of the present invention.

Figure 2B is a side view of a three-dimensional doll figure wearing (bellbottoms) pant legs 66 and 68 according to an embodiment of the present invention.

10      Figure 2C is a front view of a three-dimensional doll figure wearing (bellbottom) pant legs 66 and 68 according to an embodiment of the present invention.

Figure 2D is a front view of a three-dimensional doll figure wearing in combination a chest covering 64, a bikini bottom 62, and pant legs 66 and 68 according to an embodiment of the present invention.

15      Figure 3A is back view of a three-dimensional doll figure wearing a top 80 according to an embodiment of the present invention.

Figure 3B is a front view of a three-dimensional doll figure wearing a top 80 according to an embodiment of the present invention.

Figures 4A and 4B shows a top having detachable sleeves 84 according to an embodiment of the present invention.

20      Figure 5A is a side view of a three-dimensional doll figure wearing a top 86 and a skirt 90 according to an embodiment of the present invention.

Figure 5B is a back view of a three-dimensional doll figure wearing a top 86 and a skirt 90 according to an embodiment of the present invention.

Figure 6 depicts a fashion wheel.

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**DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS**

For better understanding of the invention, exemplary embodiments will now be described in detail. Frequent reference will be taken to the appended drawings. Reference numerals are used to indicate certain parts and locations in the drawings.

30      This detailed description describes only a few of the possible configurations of simulated clothing for dolls indicated by the present invention. These examples are

intended to show just some of the possibilities. Variations and other configurations are included within the scope of the invention.

Figure 1 shows a collection of dolls 10. Each doll includes at least one simulated article of clothing made from one of the pieces of material having self-adherent and elastomeric properties. The articles of clothing include, but are not limited to, tops, bottoms, accessories such as neckwear, and footwear. They are secured to each doll by having at least one piece wrapped around or placed over a portion of the doll and self-adherently connected to itself or another piece of same or similar material also on the doll.

More specifically, the first (left-most) doll 12 is fitted with a top 22 and a skirt 20.  
10 Top 22 can be formed by a piece of the self-adherent elastomeric material that is wrapped around the upper torso of the doll and portions of the material overlap and press together to secure the piece to the doll. This major piece can be formed from one color of the material. A second piece 13, much smaller and in strip form, can be wrapped around the doll's neck and self-adhered into place but also slightly overlap and adhere to the top of the torso piece  
15 to form a turtle-neck type looking integrated top article of clothing. Therefore, this top article of clothing is made out of two pieces, like or different colors of the same material. The self-adhering nature of the material allows its securing to the doll irrespective of the material from which the doll is made of. The elasticity of the material allows for slight stretching and maneuvering of the material needed to fit. It also allows those same pieces  
20 to be used on dolls of somewhat different sizes.

In this example, mounted on an outer surface of the top 22 is an ornament 11 which is self-adhesive. A layer of the same material, but of different color, is cut into any shape or size to form an ornament 11 or other pattern. A still further small piece of different colored same material can be used to form the center of the ornamentation 11 attached to  
25 the top of the doll of Figure 1. Therefore, a plurality of pieces of the material, cut to different shapes and sizes, could be used to create a simulated integral top article of clothing for the doll.

Importantly, the article of clothing is reconfigurable. The ornament shown in Figure 1 can be removed. It could be replaced by different ornamentation. The turtle-neck  
30 13 could be removed. It could be replaced by different pieces forming different structure (e.g., straps for the top, or a V-neck collar). The main "tube top" portion could be removed

and replaced with a different shape or size piece. Other ornamentation could be added. Still further, the tube top portion could be made of more than one piece. And, this article of clothing could be removed, and placed on another doll in the same configuration, or reconfigured in a different look or fashion on another doll.

5       The first (left-most) doll of Figure 1 also includes a bottom simulated article of clothing, in this case skirt 20. Skirt 20 is made of one larger piece of the self-adherent elastomeric material wrapped around the doll to form a skirt. The self-adhering properties of the material allow it to be secured in place and the material is not dependent on some type of adhesion or coherence to the doll body or any other fastening devices. It is thus  
10      quick and easy to put in place. It does not have to be exactly sized as it can be wrapped around and overlapped. The thickness of the material is such that it does not look bulky if overlapped. Furthermore, skirt 20 is ornamented with one or more additional different colored pieces of the material; here, repeating triangular shapes 15 at the lower margin of the skirt. The skirt is reconfigurable. Triangles could be removed and replaced by other  
15      ornamentation. Again, the skirt could be one-piece or several overlap pieces of the material (e.g., to make a multi-piece skirt). Or the pieces of the skirt could be removed and used to make a different piece or pieces of simulated clothing on the same doll or a different doll.

Other embodiments of the lower body article of clothing in the form of a doll skirt  
20      may be designed to have pleats. Due to the elasticity and self-adhesiveness of the material, pleats may be formed, if desired, by folding the material in an accordion-like manner. The skirt can also be fashioned to form a “gathered skirt” in which the elastomeric material is drawn together around the waist.

Additional garment construction features may include “darts”, used to shape the  
25      elastomeric material to the curves of the doll. Darts can be straight, for an easy fit, or curved for a closer-to-the doll body-fit. Darts are typically found in the bust, waist and hip areas, where the doll’s body is the most contoured. Analogous features can be formed in any piece of simulated clothing or ornamentation made according to the invention.

The second doll 14 is fitted with a shirt 28, a skirt 26, and shoes 24. The clothing  
30      can be formed from elastomeric, non-woven material. It provides a high degree of realism as compared to some existing doll clothing-simulated articles particularly two-dimensional

styles. A realistic look can be provided by adding niceties, if desired, to the articles of clothing, such as seams 27 to a shirt as shown in the second doll 14 of Figure 1. Realism is further enhanced, if desired, by adding details such as belts 45, sashes 43, and choker 42, as shown in Figure 1 on the third 16 and fourth dolls 18. However, the clothing does not have to be pre-manufactured before placement on the doll. The pieces used to create the simulated clothing can be relatively simple shapes.

In mounting ornamentation 11 or additional accessories such as a belt 45 or a sash 43 as shown in Figure 1, upon application of pressure the self-adherent properties of the material allow the ornamentation or accessory to become quite securely affixed to the article of clothing, yet can be removed quickly and easily. For added interest, the ornamentation 11 and accessories 45 and 43 may be of like or different colors or patterns to enliven the clothing article.

The four different examples of simulated clothing in Figure 1 therefore illustrate, by example, just a few of the wide variety of options available to create different clothing. By clothing, it is meant to include not only traditional tops and bottoms of clothing but also accessories such as neck bands, head bands, wrist bands, gloves, belts, socks, footwear, headwear, and any other wearable items. It is also meant to include ornamenting other types of clothing such as wrap-around doll boots or wrap-around or over other types of doll clothing or accessories.

The examples of Figure 1 also illustrate just a few ways pieces of material can be preformed or cut and configured for use. Some of the pieces can be rectangular or other common shapes. Others can be asymmetrical or complex shapes. For example, the ornamentation 11 on the left-most doll 12 could be cut into a flower shape or individual petals of the flower made out of the material and then adhered over the top of the tube top. Another example is the top 48 of the right most doll 18. It can be precut so that when wrapped it forms a V-neck and a seam diagonal across the front of the doll.

Figure 1 also shows that the material can even be cut into relatively narrow and long strips (see leg lacings of boots 24 of the second-from-the-left doll 14).

Specific examples of how articles of clothing can be built from one or more pieces of the material are shown in Figures 2A-D, 3A-B, 4A-B, and 5A-B.

Due to the elasticity and self-adhesiveness of the material, the articles of clothing can be fitted in a life-like way, i.e., trousers can be made by making a bathing suit bottom 60 and 62 as depicted in Figure 2A, then forming pant legs 66, 68 as shown in Figures 2B and 2C by wrapping a strip of the elastomeric, non-woven material around the leg of the  
5 doll and pressing a first ending fastening means 74 on a second ending fastening means 76. Bellbottoms can be made by leaving the back legs 70 open below the knee 78. Additionally, a flared looked can be incorporated into any article of clothing by stretching the elastomeric, self-adherent material into tension.

Lower body articles of clothing in the form of a skirt are shown generally at  
10 numerals 20, 26, 32 and 90 of the figures. Such articles are connected by self-adhering one end of the material to the other end by wrapping it around the waist region of the doll. For added detail, extended tab(s) 25 (see Figure 1) may be placed on the skirt 26 as shown at the reference numeral. Likewise, shorts 46 (Figure 1) can be cut to fit the doll figure and accessorized to add further realism.

15 Upper articles of clothing, such as tops 22, 28, and 48 and tube tops 40, 64, 80, 82, and 86 as shown in the figures, may be more easily fitted in a life-like manner. Additionally, sleeves 84 as shown in Figures 4A and 4B may be firmly attached to the top 82 at one end and attached to the back of the top. Likewise long sleeves 29 worn by the  
20 second doll 14 of Figure 1 can be attached to the shirt 28. While not shown, one garment can be donned over another, e.g., a jacket over a dress and/or skirt. The articles of clothing are easily interchanged, even by younger children.

As indicated the preferably elastomeric, self-adherent material can also be used to provide the doll figure with shoe apparel such as strappy shoes 24, open-toed shoes 30 or boots 44. Other accessories are possible.

25 Figures 2-5 therefore show some of the different configurations to simulate clothing made from piece or multiple pieces, and give illustrations of how basic pieces can be used to build more complex articles of clothing.

While particular embodiments have been described, the invention is not limited thereto. For example, dolls according to the invention can comprise male figures and non-  
30 human figures as well as female dolls. The articles of clothing can include without limitation suits, shirts, coats, shorts, cloaks, capes, uniforms, hats, shoes, boots, and

scarves. In addition, the term “articles of clothing” as used in the specification should be understood to include any flexible article which can be fitted to the external surface of a doll.

The invention is applicable to dolls of any shape and size.

5 While the Detailed Description of Exemplary Embodiments has focused on dolls, it should be appreciated that the invention can also likewise be applied to doll-sized or dress form shaped mannequins or other shapes or configurations that simulate or could be used to simulate a doll figure.

It can be appreciated that the material described in the preferred embodiments can  
10 be used to ornament a doll or a doll-sized or dress form shaped mannequin directly. One or more pieces of material from one or more doll clothing or ornaments could come in a kit. But the material or the kit may be used to design doll clothing or ornamentation for the doll (e.g., on dress form shaped mannequins as opposed to actual dolls). Or, the material or  
15 kit may be used to design clothing or accessories for human beings using the reconfigurable doll clothing or ornamentation of this invention on a doll or doll-sized or dress form shaped mannequin.

According to another aspect of the invention, a kit is provided. The kit comprises a plurality of pieces of elastomeric, self-adherent material; and instructions 8 for making articles of doll clothing with one or more of said pieces. The kit may further comprise a  
20 doll or doll-sized or dress form shaped mannequin. The kit may further comprise a fashion wheel as depicted in Figure 6. The wheel comprises an element which is rotatable and has various types of articles of clothing on it. The wheel also comprises an element that has all the outfits on it. Upon a spin event, one can see a different outfit appear on the doll-sized or dress form shaped mannequin enabling one to best match or combine the simulated  
25 articles of clothing or accessories with an outfit.

While this invention has been described in detail with particular reference to a preferred embodiment thereof, it will be understood that variations and modifications thereof might be evolved which are within the spirit and scope of the invention as described in the following claims.

30 One specific example of material that could be used with the foregoing examples is COACH® available from the Johnson & Johnson Company of Skillman, New Jersey.

COACH® is a self-adherent wrap made of a laminate of non-woven material and elastic fibers placed lengthwise to provide elasticity. The elastic wrap contains a cohesive material that makes it stick to itself but not to other materials or skin. The product is available in non-sterile and sterile forms. It does not need adhesive, pins or clips for  
5 attachment to itself. It generally will not slip once secured. It is relatively lightweight and porous. It does contain natural rubber latex. However, other materials having similar properties can be used. For example, Johnson & Johnson makes a version of COACH® that does not contain natural rubber latex. Both of these products function like tape but sticks only to itself. These materials have some elasticity and sufficient strength to resist  
10 tearing or shearing. They are also resistant to deformation and the self-adhering properties last for a substantial period of time. These materials also do not stick to hair, including doll hair. They are self-adhering but non-tacky. These materials are conformable to different surfaces and shapes.